

REMARKS

Claims 40-75 are pending in the present application. In the above amendments, new claims 76-96 have been added.

In the Office Action mailed July 16, 2003, the Examiner rejected claims 40-75 under 35 U.S.C. § 102 as being anticipated by Blakeney, II et al., U.S. Patent No. 5,267,261, hereinafter referred to as "Blakeney."

Applicant respectfully responds to this Office Action.

35 U.S.C. §102 Rejection of Claims 40-75

Applicant respectfully disagrees with the Examiner's characterization of Blakeney as teaching each and every element of Applicant's claims. Please refer to Applicant's originally filed specification, page 6, line 20 to page 7, line 4, reproduced herein (with typographical errors included) as:

The subscriber station makes an initial selection of the base station to transmit forward link data to it. In the exemplary embodiment, the subscriber station measures the energy of a time multiplexed pilot signal from each base station and selects the base station with the highest chip energy to interference (C/I) when including all multipath components from each base station. In the exemplary embodiment, the subscriber station includes a RAKE receiver that separately demodulates the multipath components of signals from each base station. An exemplary embodiment of a RAKE receiver is described in U.S. Patent No. 5,103,390.

The subscriber station determines whether the selected base station requires a handoff. That is to say, whether the selected base station is the same as the base station selected to transmit in the last frame interval.

If the selected base station does require a handoff, then the subscriber uses the method of the present invention to determine if the selected base station is receiving its reverse link transmissions. In the exemplary embodiment, the subscriber station makes this determination by looking at the history of reverse link power control commands transmitted by the selected base station. A sufficient number of power control commands by a given base station requesting the subscriber station to decrease its transmission energy indicates that the reverse link signal is being received by the base station with sufficient energy. It will be understood that other methods of performing this analysis are equally applicable, for example the base stations could intermittently transmit a message indicating the average quality of the received reverse link signal.

In a cellular system, the forward link quality is not necessarily indicative of the reverse link quality between a mobile station and base station. Therefore, the present invention provides a method for the subscriber station to determine the quality of the reverse link. This allows the subscriber station to avoid sending a Data Request Control (DRC) message to a base station that is not able to receive the message. The subscriber station determines if a selected base station is able to receive reverse link transmissions. If the selected base station is able to receive reverse link transmissions, then forward link transmissions are requested by the subscriber station. If the selected base station is not able to receive reverse link transmissions, then handoff to the selected base station is prohibited.

With respect to Applicant's claim 40, pending as:

40. (New) In a wireless communication system, a method for performing handoff comprising:

receiving, by the subscriber station, pilot signals and reverse link power control commands from one or more base stations;

selecting a first base station for transmission of forward link data to the subscriber station based, at least in part, on energy of the pilot signals received from the one or more base station; and

selectively performing a handoff to the first base station based, at least in part, on whether signals transmitted by the subscriber station are received by the first base station with sufficient energy according to the reverse link power control commands received from the first base station.

Pending claim 40 specifically recites basing a handoff decision on "whether signals transmitted by the subscriber station are received by the first base station with sufficient energy" and further that such condition is determined at the subscriber station based on the "reverse link power control commands received from the first base station."

While Blakeney teaches a wireless communication system having a handoff procedure and a reverse link power control procedure. Blakeney does not teach or suggest the limitations of Applicant's claims. Specifically, the system of Blakeney teaches the mobile station monitoring the quality of the pilot signals received from one or more base stations for the Active Set. In addition, Blakeney teaches reverse link power control; however Blakeney does not teach or

suggest using the reverse link power control information for selectively performing handoff. In other words, Blakeney does not combine the two processes, but performs each independently. See Blakeney, col. 29, lines 37-40. Blakeney does not teach or suggest the subscriber station determining a quality of the reverse link and basing a handoff decision thereupon.

Further, Blakeney does not teach or suggest using the reverse link power control commands sent by the base station to the subscriber station to determine a quality of the reverse link and basing a handoff decision thereupon. Blakeney does not teach or suggest using the reverse link power control commands to determine whether signals are received at the base station with sufficient energy and basing a handoff decision thereupon.

Reinstatement of Claims

Applicant herein presents new claims 76-89, which reinstates claims 1, 3-4, 7, 19, 24-25, 27-28, 33-34, and 37-39. The prior art of record does not individually or in combination teach each and every limitation of the claims. Applicant believes pending claims to be patentable over the prior art of record.

Drawings

Applicant has concurrently filed herewith a Letter to the Official Draftsperson submitting formal drawings to replace the originally filed informal drawings, including corrected drawing informalities indicated on Form PTO-948 attached to the Office Action.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 10/30/2003

By: Sandra L. Godsey
Sandra L. Godsey, Reg. No. 42,589
Tel. No.: 858-651-4517

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 651-4125
Facsimile: (858) 658-2502